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FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

HAN, CLEMENCE S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2668

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/623,775

Applicant(s)

HEISS ET AL.

Examiner

Clemence Han

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Responsive to amendment received on May 7, 2004, amended claims 1-6 and 8 are entered as requested.
2. Responsive to supplemental amendment received on June 22, 2004, amended claims 2, 4 and 6 are entered as requested

Claim Objections

3. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The limitation of removing ATM cells from the frame beginning farthest toward a back of the waiting list is already claimed in claim 1.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claim 1-5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Lyon et al. (U.S. Patent 6,151,299).

In regarding to claim 1, Lyon teaches a method for removing ATM cells 46 from a frame in a waiting list (Figure 2b), comprising: storing a frame start identifier that identifies an ATM cell 50 in the waiting list that precedes a first ATM cell 46 of the frame 42 (Column 6 Line 1); and calling the frame start identifier before removal of the ATM cell of the frame (Column 5 Line 35 – 38); wherein the frame begins farthest toward a back of the waiting list (Column 4 Line 56–62).

In regarding to claim 2, Lyon teaches removing ATM cells from the frame beginning farthest toward a back of the waiting list (Column 4 Line 56–62).

In regarding to claim 3, Lyon teaches removing following ATM cells of the frame up to and including a last ATM cell of the frame upon arrival or following arrival at the waiting list (Column 3 Line 53 – 56).

In regarding to claim 4, Lyon teaches the first ATM cell 46 of the frame 42 immediately preceded by a last ATM cell 50 of a different frame 40, and further comprising: referencing the last ATM cell by the frame start identifier (Column 6 Line 1).

In regarding to claim 5, Lyon teaches the first ATM cell of the frame immediately preceded by an individual ATM cell not allocated to a frame, and

further comprising: referencing the individual ATM cell by the frame start identifier (Figure 3b).

In regarding to claim 8, Lyon teaches performing a check at or following attaching of an arrived ATM cell to an end of the waiting list to see whether the arrived ATM cell is a last cell of a frame (Column 5 Line 66 - 67); and as warranted, storing a value that references the arriving ATM cell as the frame start identifier (Column 6 Line 1 - 2); wherein the ATM cells of the appertaining frame cannot be removed from the waiting list.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon et al. in view of Caldara et al. (U.S. Patent 5,822,540)..

In regarding to claim 6, Lyon teaches a method for removing ATM cells 46 from a frame in a waiting list (Figure 2b), wherein the frame begins farthest toward a back of the waiting list (Column 4 Line 56–62). Lyon, however, does not teach storing a predetermined inhibit value so that the ATM cells of the frame cannot be removed from the waiting list when the first ATM cell of the frame is followed in the waiting list by an individual ATM cell not allocated to any frame. Caldara

teaches storing a predetermined inhibit value so that the ATM cells of the frame cannot be removed from the waiting list when the first ATM cell of the frame is followed in the waiting list by an individual ATM cell not allocated to any frame (Column 3 Line 66 – Column 4 Line 5). It would have been obvious to one skilled in the art to modify Lyon to inhibit the removal of the individual ATM cell not allocated to any frame as taught by Caldara in order to keep the ATM cells important to the system operation.

In regarding to claim 7, Caldara teaches the predetermined inhibit value stored at least one of upon arrival of the individual ATM cell at the waiting list and when the individual ATM cell is added to the waiting list (step 26 in Figure 2).

Response to Arguments

8. Applicant's arguments filed on May 7, 2004 have been fully considered but they are not persuasive.

The applicant argues, regarding claim 1, that Lyon does not disclose or suggest that the frame begins farthest toward a back of the waiting list (Page 5 Line 14–15 of the amendment).

Lyon, however, teaches specifying a threshold near the end of the buffer (Column 4 Line 56–59) which is toward a back of the waiting list and discarding cells once the buffer fill reaches the threshold (Column 4 Line 61–62). By Lyon's

method, the frame where ATM cells are discarded will be the frame farthest toward a back of the waiting list not the frame closest to the front of the waiting list as the applicant argues (Page 5 Line 16–17).

Therefore, the examiner contends that Lyon teaches the limitations in the claim 1.

The applicant further argues, regarding claim 6, that neither Lyon nor Caldara disclose or suggest that the frame begins farthest toward a back of the waiting list (Page 6 of the amendment).

Lyon, however, teaches that the frame begins farthest toward a back of the waiting list as shown in the response to the argument on claim 1.

Therefore, the examiner contends that Lyon teaches the limitations in the claim 6.

9. The examiner directs the applicant's attention to possible typographical errors in the remarks filed on May 7, 2004.

On page 5 Line 13–14, there is “claim 23”. However, the application has only claim 1–8.

On page 6 Line 8–9, there is “claim 23”. However, the application has only claim 1–8.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H.
Clemence Han
Examiner
Art Unit 2668



STEVEN NGUYEN
PRIMARY EXAMINER